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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,420	02/10/2004	Uwe Allerding	H01.2-11473	9731

490 7590 02/15/2007
VIDAS, ARRETT & STEINKRAUS, P.A.
6109 BLUE CIRCLE DRIVE
SUITE 2000
MINNETONKA, MN 55343-9185

EXAMINER

BRAHAN, THOMAS J

ART UNIT	PAPER NUMBER
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3654

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/775,420

Applicant(s)

ALLERDING ET AL.

Examiner

Thomas J. Brahan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which applicant regards as his invention.

2. Claims 1-6 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In the last three lines of claim 1, the limitation "induces coordinated actuation of at least one of the actuation drives such that they cause the load carrying fork to be automatically moved to a predetermined position" is not understood. How is applicant considering the term "coordinated actuation" as being applied to at least ONE drive? How is the actuation of one drive considered as coordinated?

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

5. Claims 1-3 and 6, as best understood, are rejected under 35 U.S.C. § 102(b) as being anticipated by Yuki. Yuki shows a fork-lift truck comprising:

a mast (upright 2),

a load carrying fork (fork 7),

a pair of actuation drives (lift cylinder 4 and tilt cylinder 3), one being a lifting and lowering drive (lift cylinder 4), and one being an inclination drive (tilt cylinder 3),

an analog sensor (potentiometer 12; see column 5, lines 55 and 56), and

a control device (a microcomputer), wherein:

the load-carrying fork is engaged to and supported by the mast and is adjustable in height by means of the

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lifting and lowering drive (4),

wherein the inclined position of the load-carrying fork is adjustable relative to the a horizontal axis by the inclination drive (3), and

the control device is in electrical communication with and regulates the actuation of the lifting and lowering drive and is in separate electrical communication with and separate regulates the inclination drive,

the regulation comprises utilizing the analog sensor (12) to detect the inclined position of the load-carrying fork (7) and correspondingly emitting an inclination signal to the control device, the control device in turn processes the inclination signal and induces is a coordinated action of at least one of the actuation drives such that they cause the load-carrying fork to be automatically moved to a predetermined position (see column 12, lines 2-9, which recites "said control unit which drives a tilt cylinder for tilting the upright backward corresponding to the predetermined command signal and which drives a lift cylinder for lifting and lowering the fork according to a predetermined command signal to a target height").

The target inclination is set to have the forks (7) at a horizontal position, see column 2, lines 60-63, as recited in claims 2 and 3. The target height is a predetermined height, as recited in claim 6.

6. Claim 4, as best understood, is rejected under 35 U.S.C. § 103(a) as being unpatentable over Yuki et al in view of Avitan et al. Yuki et al shows the basic claimed fork lift device, as detailed above, but varies from claim 4 by not limiting the vehicle speed based upon fork lifts operator parameters. Avitan et al shows a similar control device which limits vehicle speed, see column 18, lines 42-58. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the fork lift control arrangement of Yuki et al by having the control device limiting the vehicle speed, to prevent tipping, as taught by Avitan et al.

7. Claim 5, as best understood, is rejected under 35 U.S.C. § 103(a) as being unpatentable over Yuki et al in view of Ishikawa. Yuki et al shows the basic claimed fork lift device, as detailed above, but varies from claim 5 by determining the tilt based upon the tilt cylinder position instead of using a tilt sensor. Ishikawa shows a similar control device and teaches that the measuring can be indirect measuring on the tilt cylinder, or could be carried out by means of a tilt sensor on the mast, see the last two lines of column 11 through the first three lines of column 12. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the fork lift control arrangement of Yuki et al by substituting a tilt sensor for the cylinder sensor, as these are art recognized equivalents, as taught by Ishikawa.

8. Applicant argues in the amendment filed January 5, 2007, that "Claims 1 and 3 recite an analog sensor which measures the inclined position of the load carrying fork to a horizontal axis" and that Yuki et al does not make a reference to measuring the actual incline of the carrying fork. However these claims do not include direct measurements of tilt with respect to the horizontal. Claim 1 merely recites "utilizing the analog sensor to detect the inclined position of the load-carrying fork". The analog sensor of Yuki et al measures the inclined position of the

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fork by measuring the extension of the tilt cylinder. The only limitation drawn to measuring an angle with respect to the horizontal was in the originally filed claim 2, and now is only found in amended claim 5. This limitation was previously rejected based upon the reference of Ishikawa which states that measuring tilt directly with a tilt sensor and measuring tilt indirectly by measuring the extension of a tilt cylinder are art recognized equivalents. The amendment necessitated the new grounds, accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. An inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Brahan whose telephone number is (571) 272-6921. The examiner's supervisor, Ms. Katherine Matecki, can be reached at (571) 272-6951. The fax number for all patent applications is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Questions regarding access to the Private PAIR system, should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas J. Brahan
Primary Examiner
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